

## *Callophrys gryneus* (Juniper Hairstreak)

### Priority 2 Species of Greatest Conservation Need (SGCN)

**Class:** *Insecta* (Insects)

**Order:** *Lepidoptera* (Butterflies, Skippers, And Moths)

**Family:** *Lycaenidae* (Gossamer-winged Butterflies)

#### General comments:

Only 2-3 populations – previously historic; specialized host plant; declining and vulnerable habitat.

#### Species Conservation Range Maps for Juniper Hairstreak:

Town Map: [Callophrys gryneus\\_Towns.pdf](#)

Subwatershed Map: [Callophrys gryneus\\_HUC12.pdf](#)

#### SGCN Priority Ranking - Designation Criteria:

##### Risk of Extirpation:

Maine Status: **Endangered**

**State Special Concern or NMFS Species of Concern: NA**

**Recent Significant Declines: NA**

**Regional Endemic: NA**

**High Regional Conservation Priority: NA**

**High Climate Change Vulnerability: NA**

##### Understudied rare taxa:

Recently documented or poorly surveyed rare species for which risk of extirpation is potentially high (e.g. few known occurrences) but insufficient data exist to conclusively assess distribution and status. \*criteria only qualifies for Priority 3 level SGCN\*

Notes:

**Historical: NA**

**Culturally Significant: NA**

#### Habitats Assigned to Juniper Hairstreak:

##### Formation Name      Cliff & Rock

**Macrogroup Name**      **Cliff and Talus**

**Habitat System Name:** North-Central Appalachian Acidic Cliff and Talus    **\*\*Primary Habitat\*\***    **Notes:** where host plant (red cedar) present

**Habitat System Name:** North-Central Appalachian Circumneutral Cliff and Talus    **Notes:** where host plant (red cedar) present

##### Formation Name      Grassland & Shrubland

**Macrogroup Name**      **Glade, Barren and Savanna**

**Habitat System Name:** Central Appalachian Alkaline Glade and Woodland    **\*\*Primary Habitat\*\***    **Notes:** where host plant (red cedar) is present

**Macrogroup Name**      **Ruderal Shrubland & Grassland**

**Habitat System Name:** Powerline Right-of-Way    **Notes:** where host plant (red cedar) present

**Habitat System Name:** Ruderal Upland - Old Field    **\*\*Primary Habitat\*\***    **Notes:** where host plant (red cedar) present

#### Stressors Assigned to Juniper Hairstreak:

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Stressor Priority Level based on Severity and Actionability		Moderate Severity	High Severity
	Highly Actionable	Medium-High	High
	Moderately Actionable	Medium	Medium-High
	Actionable with Difficulty	Low	Low

#### IUCN Level 1 Threat      Natural Systems Modifications

**IUCN Level 2 Threat:**      Other Ecosystem Modifications

**Severity:** Moderate Severity**Actionability:** Highly actionable**Notes:** Loss of habitat from succession when ROWs, other old field habitats are abandoned

#### IUCN Level 1 Threat      Other Options

**IUCN Level 2 Threat:**      Lack of knowledge

**Severity:** Moderate Severity**Actionability:** Highly actionable**Notes:** Lack of comprehensive survey effort to identify additional occurrences and monitor status/trends of individual populations

#### IUCN Level 1 Threat      Residential and Commercial Development

**IUCN Level 2 Threat:**      Housing and Urban Areas

**Severity:** Severe**Actionability:** Moderately actionable**Notes:** Habitat loss and fragmentaion in southern ME

#### IUCN Level 1 Threat      Transportation and Service Corridors

**IUCN Level 2 Threat:**      Utility and Service Lines

**Severity:** Moderate Severity**Actionability:** Highly actionable**Notes:** The rare host plant, *Juniperus virginiana*, grows in ROWs but may require specialized husbandry practices for protection and regeneration

#### IUCN Level 1 Threat      Natural Systems Modifications

**IUCN Level 2 Threat:**      Fire and Fire Suppression

**Severity:** Moderate Severity**Actionability:** Moderately actionable**Notes:** Fire is likely beneficial for regeneration of the rare early successional host plant -- *Juniperus virginiana*

### Species Level Conservation Actions Assigned to Juniper Hairstreak:

*\*Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.*

<b>Conservation Action</b>	<b>Category:</b> Research	<b>Biological Priority:</b> high	<b>Type:</b> new
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Prepare a statewide atlas and conservation assessment.

#### Stressor(s) Addressed By This Conservation Action

Lack of knowledge

<b>Conservation Action</b>	<b>Category:</b> Habitat Management	<b>Biological Priority:</b> critical	<b>Type:</b> new
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Research host tree regeneration ecology and develop site restoration management strategies for distribution to cooperative landowners.

#### Stressor(s) Addressed By This Conservation Action

Other Ecosystem Modifications

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**Guild Level Conservation Actions:**

This Species is currently not attributed to a guild.

**Broad Taxonomic Group Conservation Actions:**

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

**Habitat Based Conservation Actions:**

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

*The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.*